

Fifth Grade “Classifying Living Things” Assessment

- 1a. Grouping things together that are alike makes it easier for us to _____ them.
- a. find
 - b. loose

1b. It makes things easier to find when we _____ them.

1c. Define classification and explain why it is important.

2a. Give two examples of how a grocery store uses classification.

2b. Give at least three examples of how a grocery store uses classification.

2c. Give three examples, other than a grocery store, where classification systems are used and explain how it is used in all three examples.

- 1. _____

- 2. _____

- 3. _____

3a. Scientists have divided living things into _____ groups.

3b. Name the five kingdoms of living things.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

3c. Name the five kingdoms of living things and give an example of each one:

	Kingdom	Example
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

4a. Give an example of a fungus:

4b. Name something that we use fungi for in our lives.

4c. Explain why fungi were separated from the plant kingdom.

5a. Give an example of a protist:

5b. Name three places where you can find protists.

5c. What groups are protists classified into?

1. _____
2. _____
3. _____

6a. Give an example of a moneran:

6b. What is the difference between monerans and protists?

6c. Explain how monerans are useful to life on Earth.

7a. Living things are divided into eight smaller groups. Check the eight groups from the choices below:

_____	Species	_____	Order	_____	Fungus
_____	Clan	_____	Kingdom	_____	Species
_____	Phylum	_____	Cousins	_____	Family
_____	Variety	_____	Genus		

7b. List the eight groups of kingdoms in order from largest to smallest.

1. _____
2. Phylum
3. _____
4. _____
5. _____
6. Genus
7. _____
8. _____

7c. List the eight groups of kingdoms in order from largest to smallest.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

8a. What two names do scientists around the world use for naming living things?

- a. first and last
- b. family and genus
- c. order and family
- d. genus and species

8b. What two names do scientists around the world use for naming living things?

8c. Explain why scientists use the genus and species name when referring to living things.

9a. Who came up with the classification system scientists use today?

- a. Aristotle
- b. Carl Linnaeus
- c. Robert Hooke
- d. William Clark

9b. Who came up with the classification system scientists use today?

9c. Explain why Carl Linnaeus changed the classification system that was being used.

10a. What is the scientific name for human beings?

- a. Homo sapiens
- b. Homo sagons
- c. Sapiens homons
- d. Human sapiens

10b. What is the scientific name for human beings?

10c. What are the two corresponding groups for the scientific name for human beings?

11a. Biologists who specialize in classification are called _____.

- a. classologists
- b. taxonomists
- c. classification specialists
- d. class biologists

11b. Biologists who specialize in classification are called _____.

11c. Explain what a taxonomist is:

12a. What does vertebrate mean?

- a. an animal that has fur
- b. an animal that has no backbone
- c. an animal that has a backbone
- d. an animal that has no fur

12b. What is a vertebrate?

12c. What is the difference between a vertebrate and an invertebrate?

13a. How many classes of vertebrates are there? Give one example.

13b. List the five classes of vertebrates.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

13c. List the five classes of vertebrates and indicate whether they are warm-blooded or cold-blooded.

	Class	Warm-blooded or cold-blooded
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

14a. Which class of vertebrates has the following characteristics: aquatic animals, breathe through gills, cold-blooded, most have scales, and most develop from eggs that the female lays outside her body? Circle the correct answer.

Mammals Birds Fish Reptiles Amphibians

14b. Which class of vertebrates has the following characteristics: aquatic animals, breathe through gills, cold-blooded, most have scales, and most develop from eggs that the female lays outside her body?

14c. Give three characteristics of fish.

15a. Which class of vertebrates has the following characteristics: live part of their lives in water and part on land; have gills when young, later develop lungs, cold-blooded, usually have moist skin? Circle the correct answer.

Mammals Birds Fish Reptiles Amphibians

15b. Which class of vertebrates has the following characteristics: live part of their lives in water and part on land; have gills when young, later develop lungs, cold-blooded, usually have moist skin?

15c. Give three characteristics of amphibians.

16a. Which class of vertebrates has the following characteristics: hatch from eggs, cold-blooded, have dry, thick, scaly skin? Circle the correct answer.

Mammals Birds Fish Reptiles Amphibians

16b. Which class of vertebrates has the following characteristics: hatch from eggs, cold-blooded, have dry, thick, scaly skin?

16c. Give three characteristics of amphibians.

17a. Which class of vertebrates has the following characteristics: warm-blooded, most can fly, have feathers and wings, most build nests; hatch from eggs, most must be fed by parents and cared for until they can survive on their own? Circle the correct answer.

Mammals Birds Fish Reptiles Amphibians

17b. Which class of vertebrates has the following characteristics: warm-blooded, most can fly, have feathers and wings, most build nests; hatch from eggs, most must be fed by parents and cared for until they can survive on their own?

17c. Give three characteristics of birds.

18a. Which class of vertebrates have the following characteristics: warm-blooded, have hair on their bodies, parents care for young, females produce milk, breathe through lungs, most are terrestrial though some are aquatic? Circle the correct answer.

Mammals Birds Fish Reptiles Amphibians

18b. Which class of vertebrates have the following characteristics: warm-blooded, have hair on their bodies, parents care for young, females produce milk, breathe through lungs, most are terrestrial though some are aquatic?

18c. Give three characteristics of mammals.

The following Colorado Model Content Standards are covered in this assessment by the questions indicated:

Questions 1a, 1b, 1c, 2a, 2b, 2c, 3a, 3b, 3c, 5c, 7a, 7b, 7c, 8a, 8b, 8c, 13a, 13b, 13c, 14a, 14b, 14c, 15a, 15b, 15c, 16a, 16b, 16c, 17a, 17b, 17c, 18a, 18b, 18c: Standard 5-8.3.1.a constructing and using classification systems based on the structure of organisms.

Questions 9a, 9b, 9c: Standard 5-8.6.c describing contributions to the advancement of science made by people in different cultures and at different times in history

Answer Key

- 1a. a. find
- 1b. classify
- 1c. Acceptable answers could include:
-Classification is grouping alike things together so that they are easier to find.
-We classify things in order for us to find them easier; and it lets us add new things to the groups we already have.
- 2a. Acceptable answers could include:
-any area found in a grocery store, i.e. deli, bakery, frozen foods, produce, etc.
- 2b. Acceptable answers should include:
-The different sections, and tell about how one of those sections is broken down, for example, Bakery has bread in one area, then by brands or sometimes types wheat and white. Then doughnuts are in another area and cakes in a third.
- 2c. Acceptable answers could include:
-library-to organize the books so they are easier to find
-museums-to organize the items so that they are easier to find
-music store, video store, clothing stores-to organize the items in the stores so that customers can find things easier
- 3a. five
- 3b. Plant, animal, fungus, protist, moneran
- 3c. Plant, (any plant as an example), Animal (any animal as an example), Fungus (mushroom, yeast, mildew, mold), Protist (algae, protozoans, amoeba, euglena, paramecium), and Moneran (bacteria, blue-green algae)
- 4a. mushroom, yeast, mold, mildew
- 4b. Acceptable answers could include:
-to put in foods we eat (mushrooms)
-to help in the production of bread (yeast) and the production of medicines like penicillin (molds)
- 4c. Acceptable answers could include:
-Fungi were separated from the plant kingdom because they get their energy from living on dead plants and animals rather than sunlight energy as plants do.
- 5a. algae, protozoans, amoeba, euglena, paramecium
- 5b. fresh water, salt water, soil, inside the bodies of other organisms
- 5c. Plant-like protists, animal-like protists, and fungus-like protists
- 6a. bacteria, blue-green algae
- 6b. monerans do not have a nucleus and protists do
- 6c. Acceptable answers could include:
-Bacteria are very useful to life on earth. Like fungi, they help break down decaying material in the soil so nutrients can be freed to be used by plants. Certain types of

bacteria are necessary for proper digestion in humans. Scientists have even been able to develop bacteria that can “eat” oil to help clean up destructive spills in the water.

7a. kingdom, phylum, class, order, family genus, species, variety

7b. kingdom, phylum, class, order, family genus, species, variety

7c. kingdom, phylum, class, order, family genus, species, variety

8a. d. genus and species

8b. genus and species

8c. Acceptable answers could include:

-Scientists use the genus and species names when referring to living things so that all scientists around the world can identify with them. They couldn't use its common name because some animals have different common names depending on the country they are found in. This would be quite confusing to the scientists. So they have decided to use the genus and species names.

9a. b. Carl Linnaeus

9b. Carl Linnaeus

9c. Acceptable answers could include:

-Carl Linnaeus extended the work of Aristotle. Aristotle had divided living things into plants and animals. Then he took his animal group and broke it down into animals that could swim, animals that could walk, and animals that could fly. Linnaeus noticed that birds and bats would be in the same group but showed very great differences in characteristics, feathers on birds, and fur on bats. So, he extended Aristotle's system into the smaller groupings we have today.

10a. a. Homo sapiens

10b. Homo sapiens

10c. Homo (genus) and sapiens (species)

11a. b. taxonomists

11b. taxonomist

11c. Acceptable answers could include:

-A taxonomist is a biologist who specializes in classification.

12a. c. an animal that has a backbone

12b. Acceptable answers could include:

-Animals that have a spinal cord enclosed in a backbone.

12c. Acceptable answers could include:

-The difference between a vertebrate and an invertebrate is that vertebrate animals have backbones and invertebrate animals do not have a backbone.

13a. five and fish, amphibians, reptiles, birds, or mammals

13b. fish, amphibians, reptiles, birds, and mammals

13c. warm-blooded include birds and mammals, cold-blooded include fish, reptiles, and amphibians

- 14a. fish
14b. fish
14c. Acceptable answers could include:
-aquatic animals, breathe through gills, cold-blooded, most have scales, and most develop from eggs that the female lays outside her body
- 15a. amphibians
15b. amphibians
15c. Acceptable answers could include:
-live part of their lives in water and part on land, have gills when young, later develop lungs, cold-blooded, usually have moist skin
- 16a. reptiles
16b. reptiles
16c. Acceptable answers could include:
-hatch from eggs, cold-blooded, have dry, thick, scaly skin
- 17a. birds
17b. birds
17c. Acceptable answers could include:
-warm-blooded, most can fly, have feathers and wings, most build nests; hatch from eggs, most must be fed by parents and cared for until they can survive on their own
- 18a. mammals
18b. mammals
18c. Acceptable answers could include:
-warm-blooded, have hair on their bodies, parents care for young, females produce milk, breathe through lungs, most are terrestrial though some are aquatic